



PKI/BLADE (Public Key Infrastructure with Biometrics for Logical Access Development and Execution)

Department of State

PKI Program Office

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Agenda

- **Program Objective**
- **PKI – Current Status**
- **PKI – Applications**
- **PKI/Biometrics**
- **Program Road Map**



Objective

- To provide the Department of State with a robust Biometric/PKI that will improve IT security while reducing cost and increasing customer satisfaction
- To satisfy the requirements of HSPD-12 / FIPS-201, GPEA, e-Sign, e-Gov, and FISMA legislation and the President's Management Agenda



PKI Current Status

- Cross Certified with Federal Bridge, and operated, at the High Assurance Level
- Domestic deployment **99%** complete
- PKI hardware and software installed on over **20,500** desktops including **6,500** overseas
- Over **24,500** Smart IDs with PKI certificates have been issued
- Complete Overseas deployment by End of CY **2006**



PKI Applications

- Secure Email, Code Signing
 - Provides Encryption and Digital Signature capability
 - Code Signing of WEB applets for internal use
- Digital Signature of Standard DoS forms
 - Hundreds of E-Forms such as Leave and Earnings, Employee Evaluation Reports, etc.



PKI Applications

- Access control to Web based applications
- Access control to Mainframe based applications
- Remote access to the Department IT resources
- Provide digital signature capability to the Machine Readable Travel Document (MRTD) application (Electronic Passport)
 - Enhanced Border Security and Visa Entry Reform Act of 2002 requires biometrics; this application ensures the integrity of the MRTD passports containing biometrics



Biometrics (BLADE)

- Objective: Provide a more secure method to control access to DOS SBU networks by eliminating User IDs and passwords.
 - Passwords are problematic: unsecured, shared, lost, and easily compromised.
 - Passwords are costly: help desk support costs.



BLADE Implementation

- Use fingerprint/finger-scan technology based on minutiae points and patterns stored on smart card.
- Operates in conjunction with Active Directory-based PKI in a Windows XP/W2K operating system on State's OpenNet network.
- Biometrics template, PKI certificates, and physical access data stored on the same smart card.



PKI/BLADE Road Map

- Near Term Goal:
 - Elimination of User IDs and Passwords on the Department OpenNet Plus system (over 45,000 users)
- Future Goal:
 - Enable Single Sign-On to critical Department applications
- Current Status:
 - IOC – March 8, 2005
 - Complete deployment by December 2006



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